

What is claimed is:

1. A search processing method, comprising:

5        searching a predetermined document group according to a search  
condition specified by a user to extract data of a plurality of  
documents;

      transforming said data of said plurality of documents into data  
to indicate said data of said plurality of documents to said user in  
a first display form and to enable said user to select each display item  
10 as a following processing key, and outputting the transformed data;

      extracting data of documents corresponding to said display items  
directly or indirectly selected by said user; and

      transforming said data of said documents corresponding to said  
selected display items into data to indicate said data of said documents  
15 to said user in a second display form specified by said user and to enable  
said user to select each display item specified based on said data of  
said documents as a following processing key, and outputting the  
transformed data.

20 2. The search processing method as set forth in claim 1, wherein each  
said first and second display forms is at least either of

      a form showing indications of extracted documents that have been  
classified by used words, each said indication including a predefined  
display matter of said document,

25        a form showing indications of said extracted documents, and  
segments between the indications, each said indication including a  
predefined display matter, and each said segment representing a degree  
of relevancy between said extracted documents, that is calculated by  
used words,

30        a form showing a graph representing a result obtained by  
classifying and aggregating said extracted documents based on used

words;

a form showing used words in said extracted documents and connection lines representing a degree of relevancy among said used words, and

5 a form showing first indications of document groups, second indications of used words, and connection lines between said first indication and said second indication, each said first indication including a specific matter, said document group being composed of extracted documents associated by said specific matter, and each said  
10 connection line representing a degree of relevancy between said document group and said used word.

3. The search processing method as set forth in claim 1, wherein said first transforming comprises:

15 clustering each said document by using said data of said plurality of documents;

extracting data concerning a display matter predefined for said first display form from said data of said plurality of documents; and

generating data to display the extracted data concerning said  
20 display matter as said following processing key for each cluster.

4. The search processing method as set forth in claim 1, wherein said first transforming comprises:

calculating a degree of relevancy between said plurality of  
25 documents by using said data of said plurality of documents;

extracting a data item concerning a display matter predefined for said first display form, for each said document, from said data of said plurality of documents; and

generating data to display said data items concerning said  
30 display matter, each said data item being extracted for each said document and being said following processing key, and a segment that

connects between said data items and represents the calculated degree of relevancy between said documents corresponding to said data items.

5. The search processing method as set forth in claim 1, wherein said first transforming comprises:

classifying said plurality of documents based on used words included in said data of said plurality of documents, and counting a number of documents in each class based on a specific matter predefined for said first display form; and

10 generate data to display the counting result.

6. The search processing method as set forth in claim 1, wherein said first transforming comprises:

15 calculating a degree of relevancy between used words included in said data of said plurality of documents; and

generating data to display said used words as said following processing keys, and a segment that connects between said used words and represents the calculated degree of relevancy between said used words.

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7. The search processing method as set forth in claim 1, wherein said first transforming comprises:

relating said plurality of documents into document groups based on a specific matter predefined for said first display form;

25 calculating a degree of relevancy between said document group and each used word included in said data of said plurality of documents; and

30 generating data to display said document group as said following processing key, by data of said specific matter, and the calculated degree of relevancy between said document group and said used word, by a segment connecting between said document group and said used word.

8. The search processing method as set forth in claim 1, wherein said second transforming comprises:

clustering each said document by using said data of said documents  
5 specified from said selected display items;

extracting data concerning a display matter predefined for said second display form from said data of the specified documents; and

generating data to display the extracted data concerning said display matter as said following processing key for each cluster.

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9. The search processing method as set forth in claim 1, wherein said second transforming comprises:

calculating a degree of relevancy between said documents by using said data of said documents specified from said selected display items;

15 extracting a data item concerning a display matter predefined for said second display form, for each said specified document, from said data of the specified documents; and

generating data to display said data items concerning said display matter, each said data item being extracted for each said  
20 specified document and being said following processing key, and a segment that connects between said data items and represents the calculated degree of relevancy between said specified documents.

10. The search processing method as set forth in claim 1, wherein said  
25 second transforming comprises:

classifying said documents specified from said selected display items based on used words included in said data of the specified documents, and counting a number of documents in each class based on a specific matter predefined for said second display form; and

30 generate data to display the counting result.

11. The search processing method as set forth in claim 1, wherein said second transforming comprises:

calculating a degree of relevancy between used words included in said data of said documents specified from the selected display items;

5 and

generating data to display said used words as said following processing keys, and a segment that connects between said used words and represents the calculated degree of relevancy between said used words.

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12. The search processing method as set forth in claim 1, wherein said second transforming comprises:

categorizing said documents specified from the selected display items into document groups based on a specific matter predefined for

15 said first display form;

calculating a degree of relevancy between said document group and each used word included in said data of the specified documents;

and

generating data to display said document group as said following processing key, by data of said specific matter, and the calculated degree of relevancy between said document group and said used word, by a segment connecting between said document group and said used word.

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13. The search processing method as set forth in claim 1, wherein said document is a patent document, and said display item is either of bibliographic information of said patent document and a used word in said patent document.

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14. The search processing method as set forth in claim 1, wherein at least either of said first and second transformings comprises specifying a display program corresponding to a display form, and generating data

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for said display program.

15. The search processing method as set forth in claim 1, wherein at least either of said first and second display forms is an arbitrary  
5 combination of predefined display forms.

16. A program embodied on a medium, for causing a computer to execute a search processing, said program comprising:

searching a predetermined document group according to a search  
10 condition specified by a user to extract data of a plurality of documents;

transforming said data of said plurality of documents into data to indicate said data of said plurality of documents to said user in a first display form and to enable said user to select each display item  
15 as a following processing key, and outputting the transformed data;

extracting data of documents corresponding to said display items directly or indirectly selected by said user; and

transforming said data of said documents corresponding to said selected display items into data to indicate said data of said documents  
20 to said user in a second display form specified by said user and to enable said user to select each display item specified based on said data of said documents as a following processing key, and outputting the transformed data.

25 17. The program as set forth in claim 16, wherein each said first and second display forms is at least either of

a form showing indications of extracted documents that have been classified by used words, each said indication including a predefined display matter of said document,

30 a form showing indications of said extracted documents, and segments between the indications, each said indication including a

predefined display matter, and each said segment representing a degree of relevancy between said extracted documents, that is calculated by used words,

5 a form showing a graph representing a result obtained by classifying and aggregating said extracted documents based on used words;

a form showing used words in said extracted documents and connection lines representing a degree of relevancy among said used words, and

10 a form showing first indications of document groups, second indications of used words, and connection lines between said first indication and said second indication, each said first indication including a specific matter, said document group being composed of extracted documents associated by said specific matter, and each said  
15 connection line representing a degree of relevancy between said document group and said used word.

18. A search processing apparatus, comprising:

a search unit to search a predetermined document group according  
20 to a search condition specified by a user to extract data of a plurality of documents;

a first transformer to transform said data of said plurality of documents into data to indicate said data of said plurality of documents to said user in a first display form and to enable said user to select  
25 each display item as a following processing key, and outputting the transformed data;

an extractor to extract data of documents corresponding to said display items directly or indirectly selected by said user; and

a second transformer to transform said data of said documents  
30 corresponding to said selected display items into data to indicate said data of said documents to said user in a second display form specified

by said user and to enable said user to select each display item specified based on said data of said documents as a following processing key, and outputting the transformed data.

5 19. The search processing apparatus as set forth in claim 17, wherein each said first and second display forms is at least either of

a form showing indications of extracted documents that have been classified by used words, each said indication including a predefined display matter of said document,

10 a form showing indications of said extracted documents, and segments between the indications, each said indication including a predefined display matter, and each said segment representing a degree of relevancy between said extracted documents, that is calculated by used words,

15 a form showing a graph representing a result obtained by classifying and aggregating said extracted documents based on used words;

a form showing used words in said extracted documents and connection lines representing a degree of relevancy among said used words, and

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a form showing first indications of document groups, second indications of used words, and connection lines between said first indication and said second indication, each said first indication including a specific matter, said document group being composed of

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extracted documents associated by said specific matter, and each said connection line representing a degree of relevancy between said document group and said used word.

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